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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,010	03/31/2004	Ryuji Ohmuro	1232-5363	9560
27123 7590 04/17/2007 MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER LE, THI Q	
			ART UNIT	PAPER NUMBER
			2613	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/17/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/816,010	OHMURO, RYUJI	
	Examiner	Art Unit	
	Thi Q. Le	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/26/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This Action is in response to Applicant's amendment filed on 1/26/2007. **Claims 7-8** still pending in the present application.

The indicated allowability of **claim 7** is withdrawn in view of the newly discovered reference(s) to **Mocker et al. (5,325,175)**. Rejections based on the newly cited reference(s) follow.

#### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v.*

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*HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “second prism” in claim 7 is used by the claim to describe “a transparent glass block” as shown on figure 4 reference numeral 90; the accepted meaning of a “prism” is “in Optics: a transparent solid body, often having triangular bases, used for dispersing light into a spectrum or for reflecting rays of light”. The term is indefinite because the specification does not clearly redefine the term, i.e. the specification does not show the functional/structural equivalent of the claimed “second prism” with the accepted definition of a “prism”.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claim 7** is rejected under 35 U.S.C. 102(b) as being anticipated by **Mocker et al.** (5,325,175).

Consider **claim 7**, Mocker et al. clearly show and disclose, a communication optical system comprising: a light source (read as, laser 12; figure 1); a light-receiving element (read as, detector 30; figure 1); a first and a second prisms (read as, prism 16 and block 14, respectively; figure 1) (block 14 is a functional equivalent to the claimed “second prism”), which are cemented to each other; and a beam-splitting member (read as, coating 22 between prism 16 and block 14; figure 1), which performs one of transmission and reflection towards an incident and emergent port

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(read as, the coating 22 partially reflects part of the laser beam from laser 12; while at the same time partially transmit the laser beam from laser 12; figure 1, column 1 line 66 – column 2 line 4), of a first light beam from the light source, and performs one of reflection and transmission towards the light-receiving element, of a second light beam from the incident and emergent port (read as, coating 22 also partially reflects and transmit the returning laser beam; figure 1, column 2 line 25-32) (note, coating 22 is arranged to reflects S polarized light, while transmit P polarized light), wherein the beam-splitting member is arranged at a cemented portion of the first and second prisms, and the light source and the light-receiving element are arranged on the same side with respect to the first and second prisms (read as, the coating 22 is between the contacting surface of prism 16 , 18 and block 14; figure 1); wherein the second prism (read as, block 14; figure 1) comprises a first surface (read as, surface with coating 22 which is in contact with prism 16; figure 1) cemented to the first prism, a second surface which is parallel to the first surface (read as, surface 20; figure 1) and a third surface (read as, the bottom surface between surface 20 and surface with coating 22 of block 14; figure 1) disposed on the opposite side of the first surface with respect to the light source, and the third surface is arranged such that the third surface forms an angle of  $90^{\circ}$  with respect to both the first surface and the second surface of the second prism (said third surface is perpendicular to surface 20 and surface with coating 22 of block 14; figure 1).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Mocker et al. (5,325,175)** in view of **Kato et al. (US Patent # 6,618,177)**.

Consider **claim 8, and as applied to claim 7 above**, Mocker et al. disclosed the communication optical system according to claim 7; but fails to disclose a driving circuit modulating the light source in accordance with communication information; and an output circuit outputting a signal from the light-receiving element.

In related art, Kato et al. disclose, a driving circuit (read as, the combination of modulating division 42 and laser driving circuit 43; figure 3) modulating the light source in accordance with communication information; and an output circuit outputting a signal from the light-receiving element (read as, light receiving circuit 44; figure 3).

It would have been obvious for a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Kato et al. with Mocker et al. Since Kato et al. disclose in details the method of generating a transmit signal and the method of processing the received signal. Further, it would have been obvious for a person of ordinary skill in the art to understand that all optical transmitter and receiver have processing unit to generate the transmitted signal and process the received signal.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Koyama, Osamu; 5,546,373
- b) Vandenberg et al.; 5,552,594
- c) Yamamoto et al.; 6,229,581
- d) Graindorge, Philippe; 6,529,327

- e) Hama et al.; 6,690,496
- f) Suzuki, Atsushi; 6,774,979
- g) Thompson, James Tristan; 6,804,063

12. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Thi Le whose telephone number is (571) 270-1104. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR




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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Thi Le*



KENNETH VANDERPUYE  
SUPERVISORY PATENT EXAMINER